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TRAFFIC SURVEY of Miles City

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A PARTIAL TRAFFIC SURVEY
OF
MILES CITY MONTANA
CONDUCTED BY THE
MONTANA HIGHWAY DEPARTMENT
IN COOPERATION WITH
THE CITY OF MILES CITY

MILES CITY TRAFFIC SURVEY

INTRODUCTION & GENERAL PROCEDURE

The Montana State Highway Department made a limited traffic survey in Miles City during May and June, 1949 for the purpose of determing traffic volumes on the principal streets within the city. The city participated in the cost of the survey to the extent of furnishing about half the personnel. A few external interviews and counts were also taken on the main through highways to determine the pattern of rural traffic entering, or passing through the city. It was believed that the data thus collected would be useful and necessary in establishing the proposed Federal Aid Urban system.

It is apparent, even to a casual observer, that Miles City has no extreme congestion or pressing traffic problem at present but a more efficient and expeditious movement of traffic may be needed in the future when traffic densities increase.

Manual classification counts were taken at 77 intersections of the principal streets in the city for periods ranging from 8 to 24 hours on week days depending on the importance of the location. Two portable counters were set up on Main Street between 7th and 8th avenues and were operated continuously for a full week. These machine counts furnished the basis for expanding the shorter manual counts to a 24 hour average. All of these density counts, after the proper expansion factors were applied, formed a picture of the internal traffic flow on most of the important city streets.

In order to gain a more thorough knowledge of the flow of external traffic through Miles City, four origin and destination stations were established and operated by the city personnel near the city limits. All traffic leaving Miles City was stopped from 6 A. M. to 10 P. M. on week days and the drivers were interviewed concerning their origin, destination and whether they made an essential stop in the city. Entering traffic was not stopped because experience in other surveys has indicated that a higher percentage of drivers, especially tourists, are able to tell where they stopped in a city rather than where they expect to stop.

Portable traffic counters were operated at each station so that the average 24 hour traffic could be established and an expansion factor developed for expanding the 16 hour interviews to an average daily traffic.

For analytical purposes, Miles City was divided into 17 zones and each origin or destination within the city was assigned to its proper zone. Each interview was then coded, punched on an I. B. M. card, sorted by zone number, and tabulated. In this manner a fairly accurate picture of the flow of external traffic to the various sections of the city was obtained.

Details such as vehicle type, whether a vehicle was licensed in Montana or out of state etc., were obtained during the survey but for purposes of this report the traffic volumes shown on the following plates include all classes of vehicles.

MILES CITY TRAFFIC SURVEY

SUMMARY AND RECOMMENDATIONS

The vicinity map of Miles City on Page 11 shows an accurate picture of the highways entering the city, their relation to each other and to the railroads. It will be noted that US 10 coming in from the west crosses the Northern Pacific Railway at grade approximately two miles west of Miles City. It then continues through the central business district on Main Street until another crossing of the same railroad is made, this time through a grade separating under-pass. Almost all traffic at present is necessarily forced to follow this route through the central business district and through the under-pass at the east end of the city.

Some attempt has been made in the past by the city authorities to establish a truck route on Bridge Street one block south of US 10 without too much success. The Bridge Street route, from Fifth Street on the west to Tenth Street on the east, forces the large trucking units to negotiate four right angle turns in five blocks and to pull back into a traffic stream of approximately 8000 vehicles per day on Main Street. Bridge Street is 54 feet between curbs which affords ample space for two lanes of ordinary city traffic and the usual parallel parking lanes, but when two large truck units meet, the passing space becomes quite limited.

Before any serious consideration is given to eliminating the Northern Pacific Railway grade crossing west of Miles City by a grade separation structure, a thorough investigation should be made of a relocation of US 10 on the south side of the Northern Pacific Railway through the city. This location would necessitate bridging the Tongue River but the cost of a suitable bridge would probably be approximately the same as an over-pass over the railway on the present route.

Atlantic Avenue appears to be the logical street to follow after entering the city limits and the section from Third Street to Montana Avenue would require very little, if any, additional right-of-way. Some difficulty will probably be encountered, however, in obtaining the necessary right-of-way between Montana Avenue and a junction with US 10 and US 212 at Main Street, a distance of approximately 1300 feet.

The results of our traffic study have indicated that over 500 vehicles on an average day in June do not make any essential stops in the city. Of this total, approximately 12 per cent or 60 vehicles per day are through trucks. Most of these through trips could and possibly would use a route south of the railroad. In addition to the 500 through trips per day approximately 226 vehicles could use all or a part of the proposed location in reaching their destination in the area south of the Northern Pacific tracks. This diverted traffic together with the traffic now using Atlantic Avenue, would bring the total volume that would use the proposed improvement up to approximately 1000 vehicles per day, on the section within the city and 500 vehicles per day on the rural section.

No estimate of the cost of this project is available at present but we recommend that a further study be made as to the location, feasibility and probable cost.

GROWTH AND DEVELOPMENT OF MILES CITY

The city of Miles City started in 1877, owes its origin to the establishment of Fort Keogh on the Tongue River in 1876. Fort Keogh was established by General, then Colonel Nelson A. Miles, and was first located about two miles from its present site at the west side of the Tongue River where it empties into the Yellowstone. It was then known as the "Contonment". The buildings were only temporary affairs thrown together for shelter until the main fort buildings could be constructed at the present site. These were completed during the years 1877 and 1878. The site on which Miles City is built was, at that time, a part of the military reservation which extended for two miles down the Yellowstone River. In less than one year the town which was called Miles City in honor of Colonel Miles, who was then commanding officer at the post, boasted a population of over two hundred people.

The post being nearly completed late in 1877, was occupied by the troops and their removal from town left a distance of four miles between Miles City and the source of its greatest trade. This was too far for convenience both to the troops and the townspeople, so consequently in March of 1878 the military authorities issued an order throwing open the part of Fort Keogh reservation lying east of the Tongue River. The people of old Miles City at once arose almost en masse and moved westward two miles to the very edge of the Tongue River where the military had established a ferry and opened an official gateway to the post.

Miles City is now the County Seat of Custer County created February 2, 1865. Custer County was, for many years, known as the center of the stockgrowing industry in the northwest and the horse sales held annually at Miles City in the early days became famous throughout the United States. As has been the case in almost all other counties of the state, much of the prestige which it once possessed because of its large cattle and sheep ranches has passed away, but in the case of Custer County what has been lost in one direction has been gained in another for in recent years intensified agriculture has developed in the area and has become more and more important. Numerous favorable conditions, including one of the longest growing seasons of any county in the state and comparatively cheap water for irrigation, have speeded the development of small farms.

Aside from agriculture and stock raising the industries are few, but the city is the main trading and distributing center for a wide area of eastern Montana. Custer County possesses no commercial timber, but large quantities of lignite coal under lying many districts furnish an economical and easily accessible fuel.

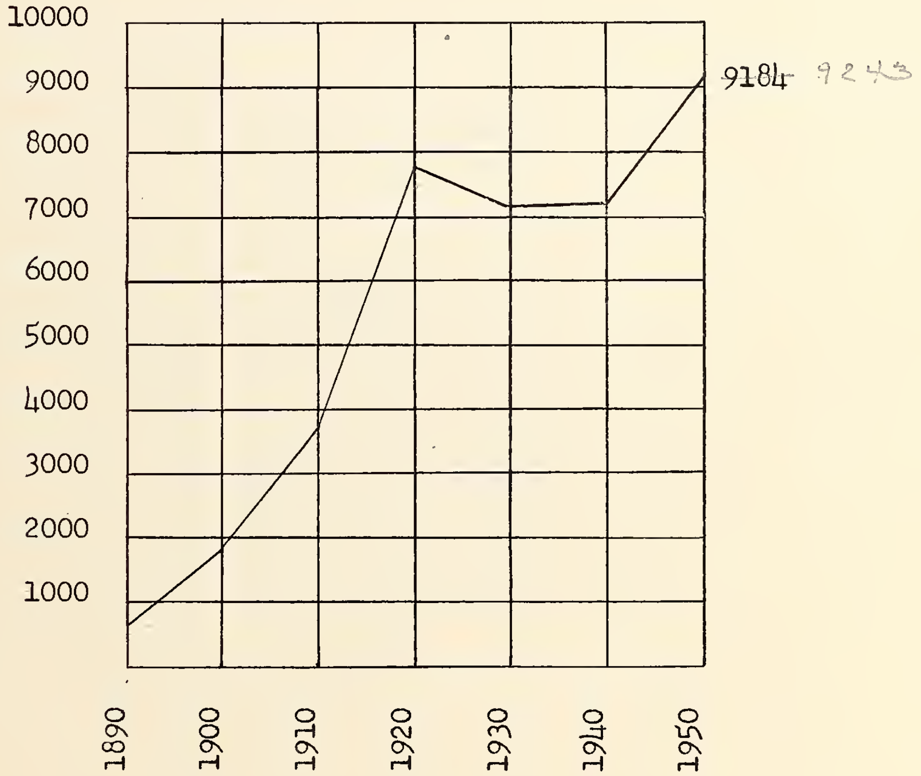
The State Industrial School for boys located one mile east of the city on a 100 acre farm, provides schooling and the opportunity of learning a trade for the juvenile wards of the state who are committed to this correctional institution.

The prosperous city built on a solid, dependable agricultural and stock-raising industry may well be expected to keep pace with other Montana urban centers.

The population trend is indicated on the following chart.

POPULATION GROWTH

CITY OF MILES CITY



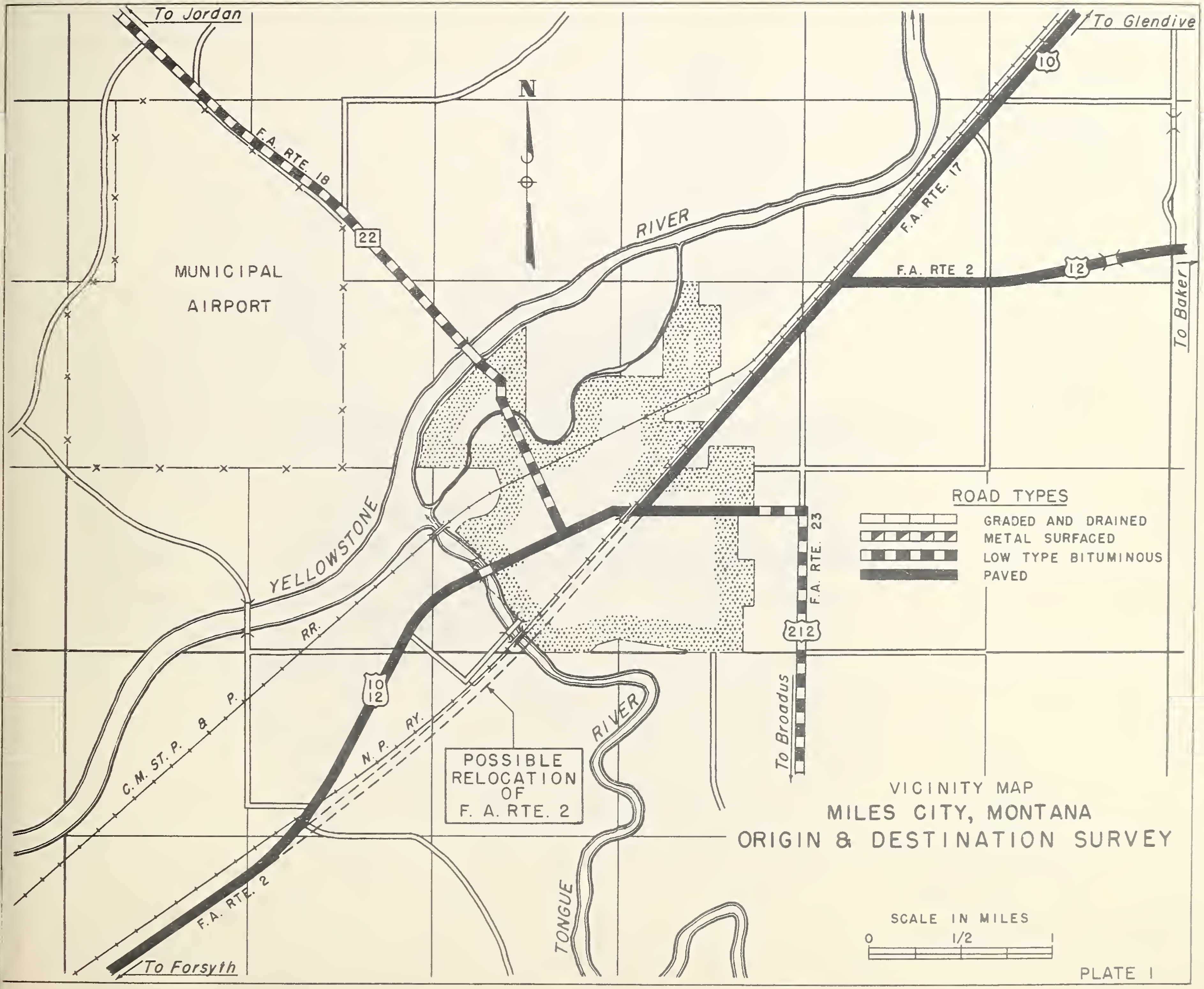
VICINITY MAP

AND

TRAFFIC CHARTS

VICINITY MAP

Plate 1 shows the principal highway and railroads serving the Miles City area and a possible relocation of F. A. Rte. 2.

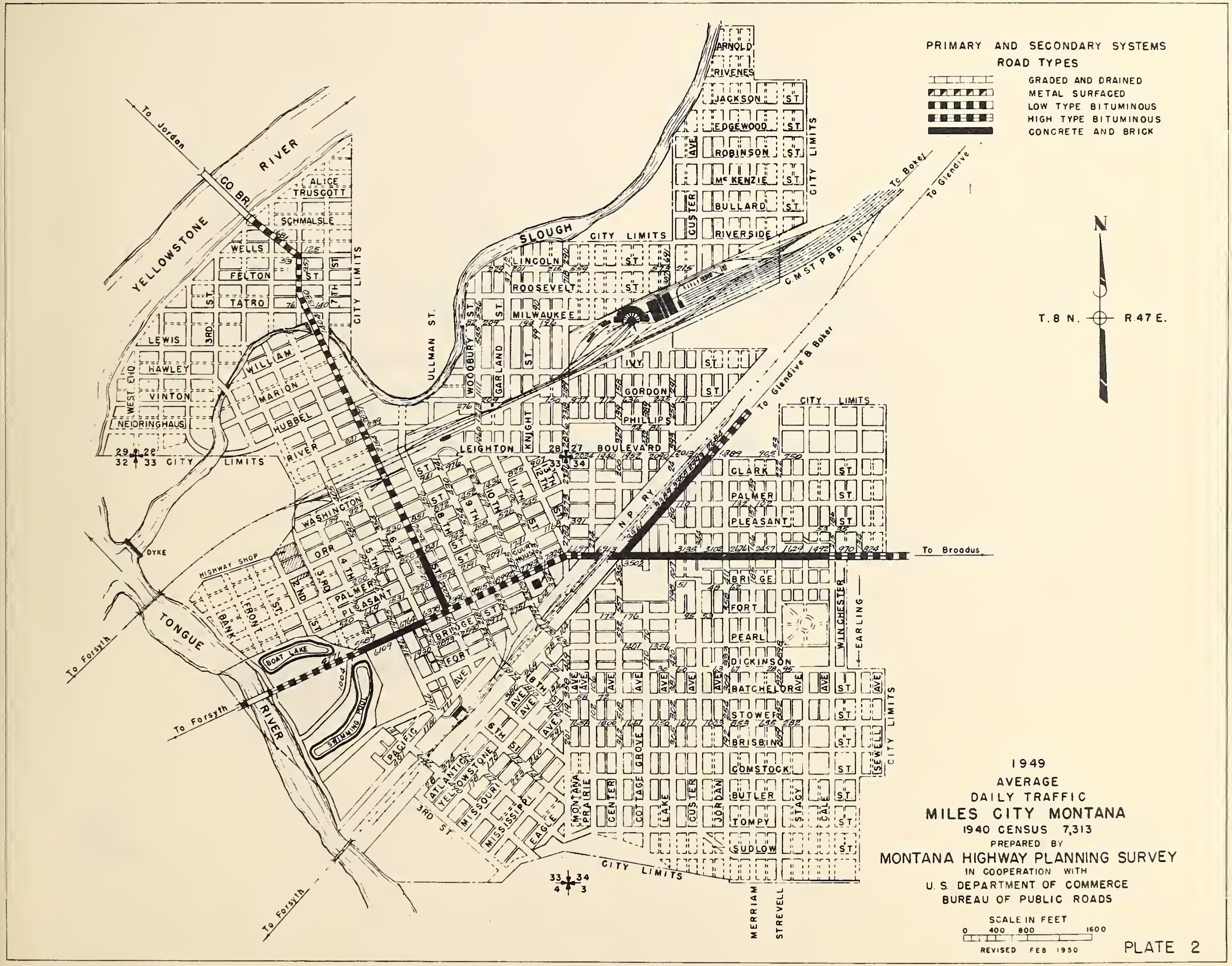


VICINITY MAP
MILES CITY, MONTANA
ORIGIN & DESTINATION SURVEY

PLATE I

1949 TRAFFIC VOLUMES

Plate 2 shows the average daily traffic volumes on Miles City's principal streets. Manual and machine counts taken in May and June 1949 were used in developing this chart and all traffic figures shown are a daily average for the year.



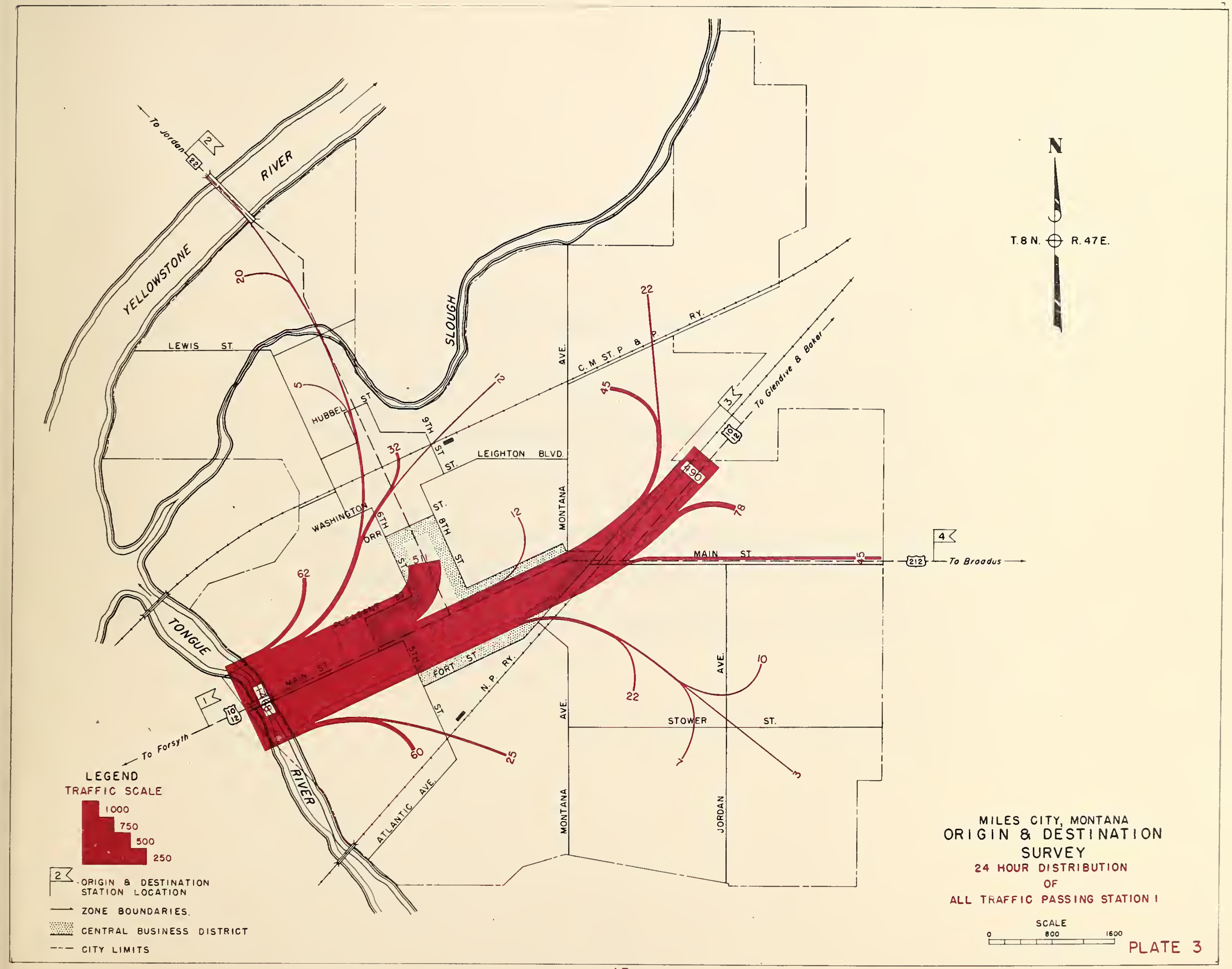
1949
AVERAGE
DAILY TRAFFIC
MILES CITY MONTANA
1940 CENSUS 7,313
PREPARED BY
MONTANA HIGHWAY PLANNING SURVEY
IN COOPERATION WITH
U. S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

DISTRIBUTION OF ALL EXTERNAL TRAFFIC PASSING STATION NO. 1

Plate 3 shows by desire lines drawn to scale the distribution to the various zones and other external stations of all traffic passing station No. 1 on an average day in June 1949.

44.5 per cent of the total traffic was foreign vehicles

34.9 per cent of the total traffic had either an origin or destination in the central business district.



MILES CITY, MONTANA
ORIGIN & DESTINATION SURVEY

24 HOUR DISTRIBUTION
OF
ALL TRAFFIC PASSING STATION 1

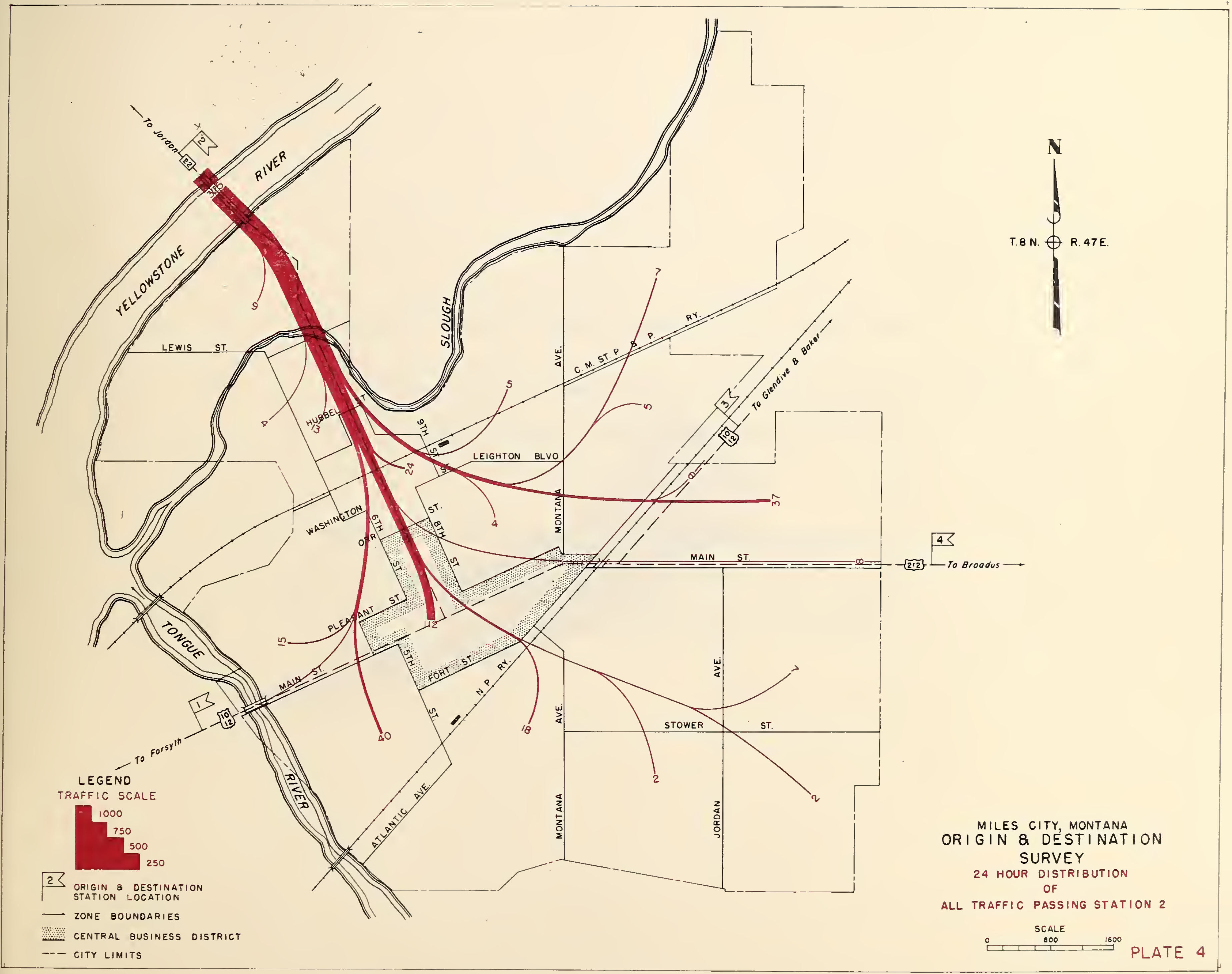
PLATE 3

DISTRIBUTION OF ALL EXTERNAL TRAFFIC PASSING STATION NO. 2

Plate 4 shows by desire lines drawn to scale the distribution of all traffic passing station No. 2 on an average day in June 1949.

6.2 per cent of the total traffic was foreign vehicles

34.5 per cent of the total traffic had either an origin or destination in the central business district.



MILES CITY, MONTANA

ORIGIN & DESTINATION SURVEY

24 HOUR DISTRIBUTION OF ALL TRAFFIC PASSING STATION 2

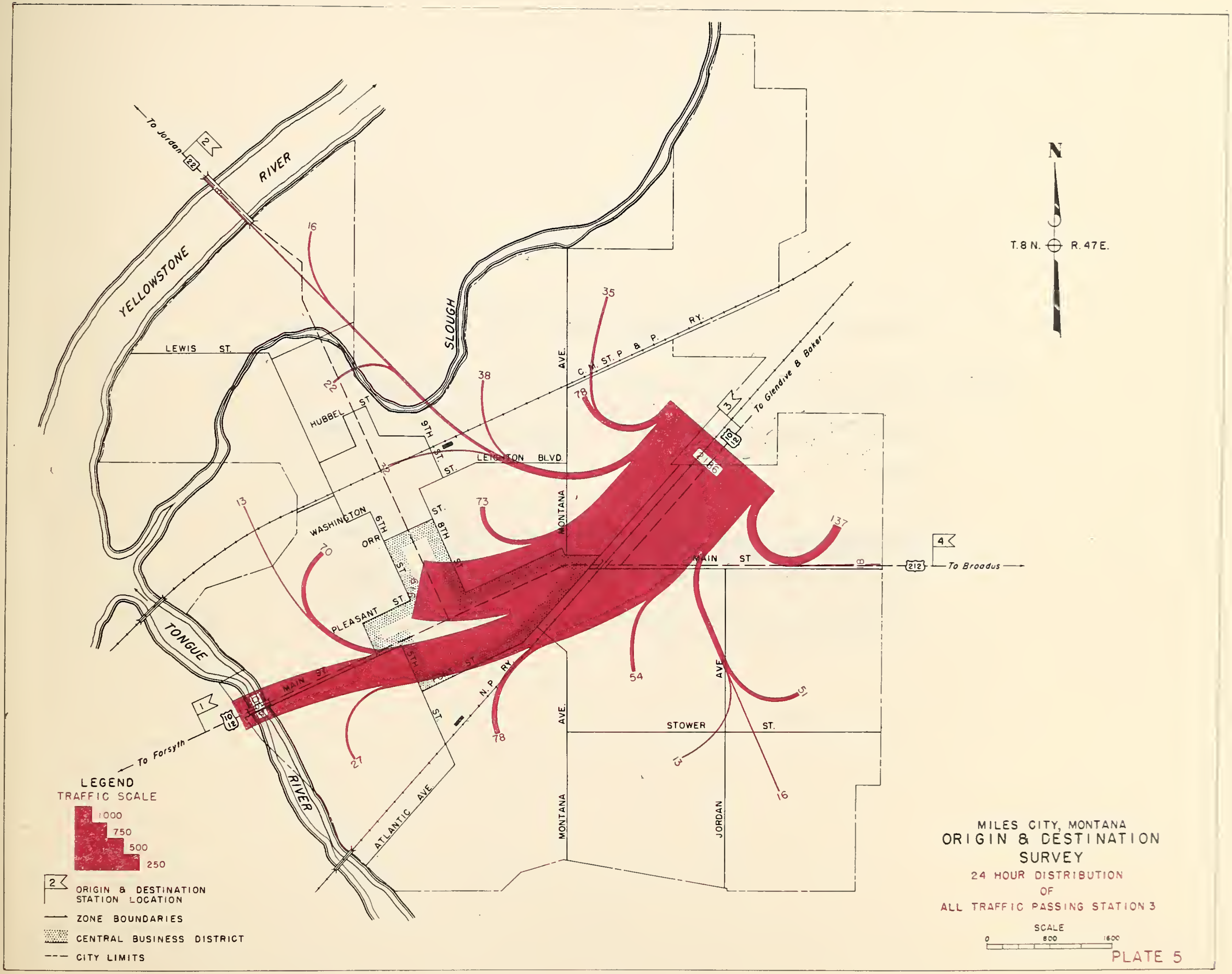
PLATE 4

DISTRIBUTION OF ALL EXTERNAL TRAFFIC PASSING STATION NO. 3

Plate 5 shows by desire lines drawn to scale the distribution of all traffic passing station No. 3 on an average day in June 1949.

28.0 per cent of the total traffic was foreign vehicles

42.0 per cent of the total traffic had either an origin or destination in the central business district.



MILES CITY, MONTANA
ORIGIN & DESTINATION
SURVEY
24 HOUR DISTRIBUTION
OF
ALL TRAFFIC PASSING STATION 3

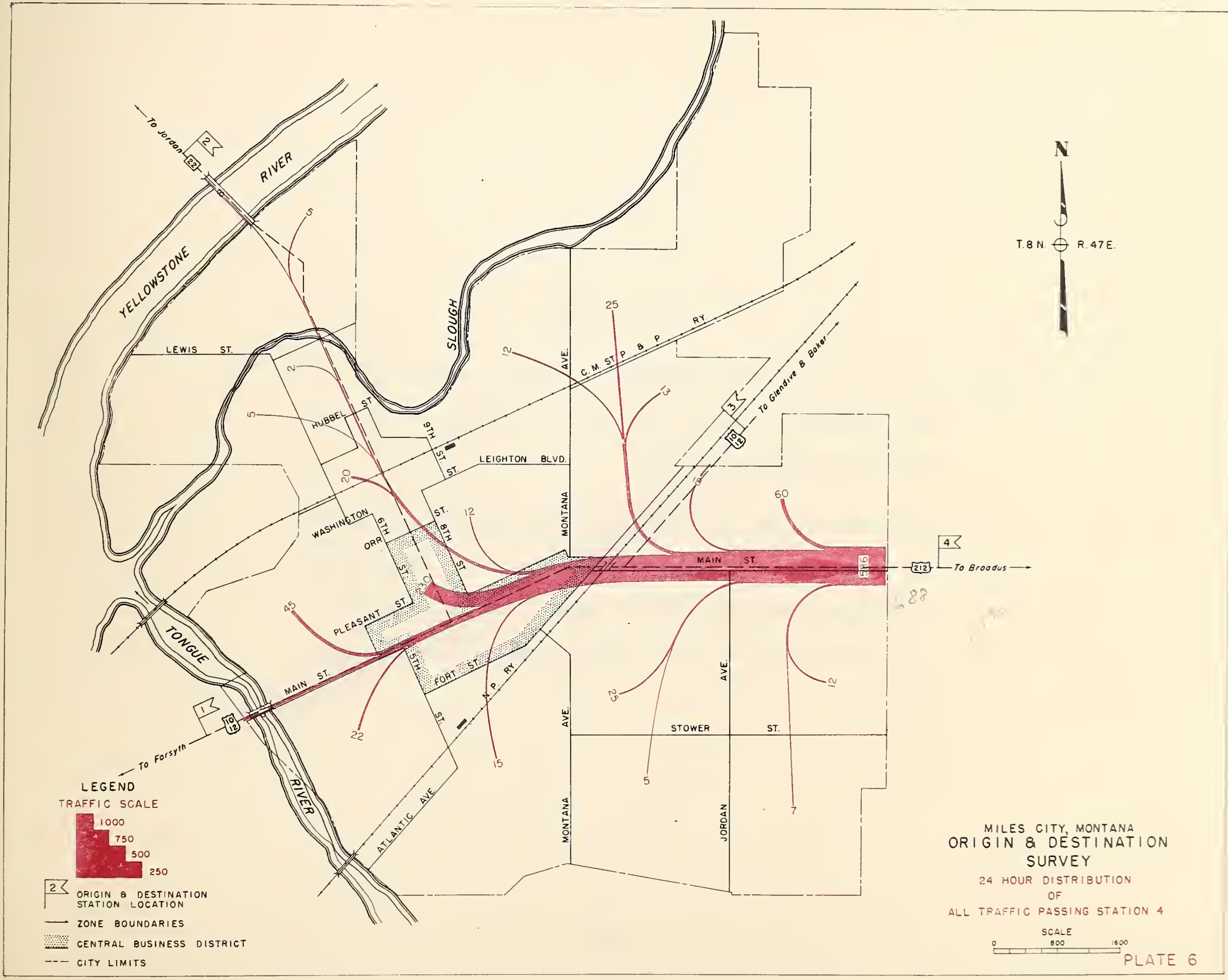
PLATE 5

DISTRIBUTION OF ALL EXTERNAL TRAFFIC PASSING STATION NO. 4

Plate 6 shows by desire lines drawn to scale the distribution of all traffic passing station No. 4 on an average day in June 1949.

12.3 per cent of the total traffic was foreign vehicles

39.2 per cent of the total traffic had either an origin or destination in the central business district.



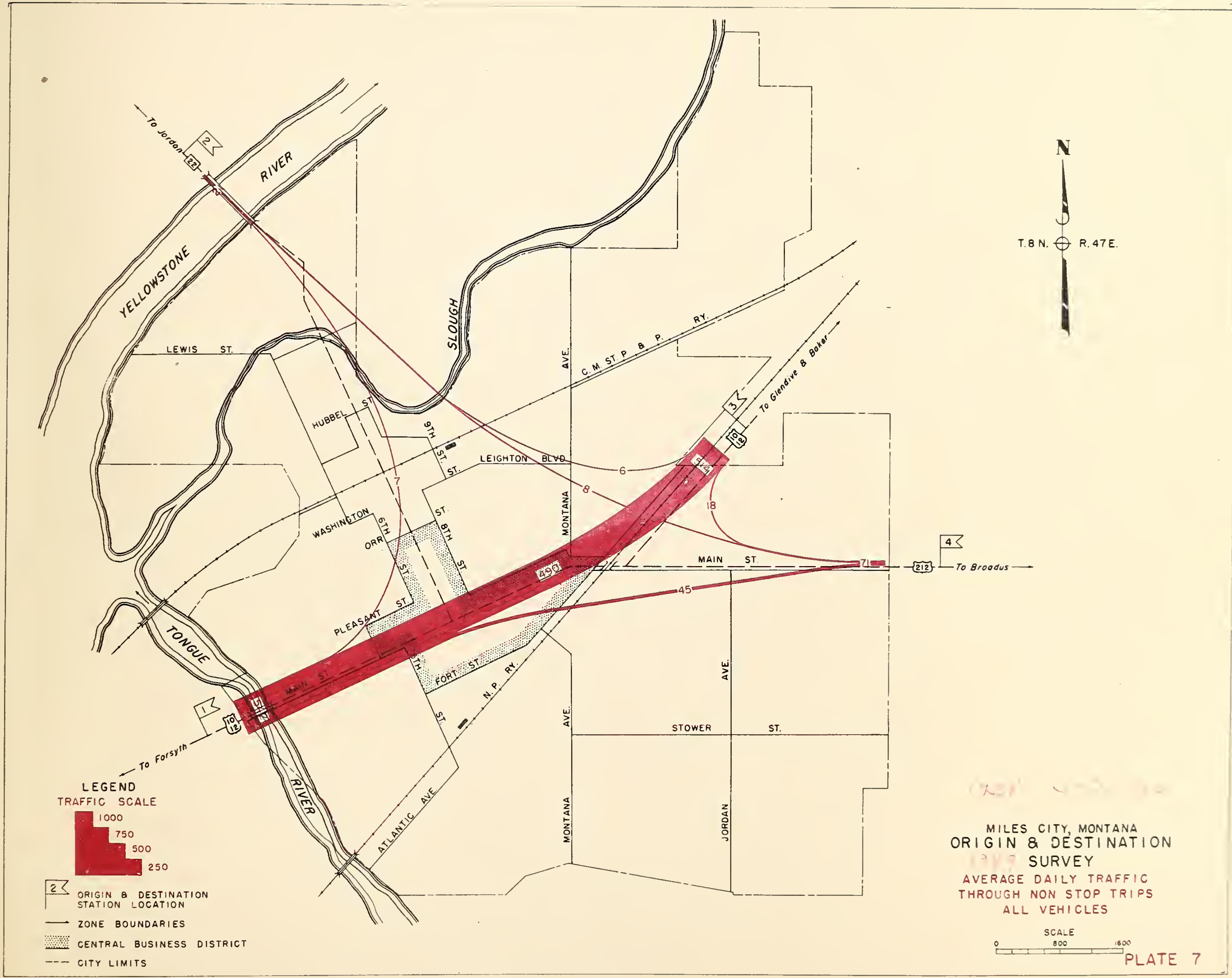
MILES CITY, MONTANA
ORIGIN & DESTINATION
SURVEY
24 HOUR DISTRIBUTION
OF
ALL TRAFFIC PASSING STATION 4

PLATE 6

THROUGH TRIPS

Plate 7 shows desire lines of through trips for an average day in June 1949 and includes trips that did not stop or made non-essential stops in the city.

The total traffic passing the four external O. & D. stations on an average day in June was 4565 vehicles of which 1148 or 25.1 per cent were through trips. Thus theoretically 25.1 per cent of the total external traffic could by-pass the city.



MILES CITY, MONTANA
ORIGIN & DESTINATION
SURVEY
AVERAGE DAILY TRAFFIC
THROUGH NON STOP TRIPS
ALL VEHICLES

PLATE 7